DEPARTMENT OF THE NAVY
SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132-5190

N00217.003958
HUNTERS POINT
SSIC NO. 5090.3

5090
Ser 06CH.RM/398
May 26, 2000

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Dear BCT members:

Enclosures (1) and (2) regarding the final first quarterly groundwater sampling report for Parcel B, Hunters Point Shipyard, are provided for your records.

Should you have any concerns with this matter, please contact the undersigned at (619) 532-0913.

Sincerely,

RICHARD G. MACH JR., P.E.
BRAC Environmental Coordinator
By direction of the Commander

Enclosure: (1) Final September - December 1999, First Quarterly Groundwater Sampling Report for Parcel B, Hunters Point Shipyard, May 26, 2000
(2) Navy response to comments

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ENCLOSURE (1)

FINAL SEPTEMBER - DECEMBER 1999 FIRST QUARTERLY GROUNDWATER SAMPLING REPORT FOR PARCEL B

DATED 26 MAY 2000

IS ENTERED IN THE DATABASE AND FILED AT ADMINISTRATIVE RECORD NO. **N00217.003957**

RESPONSE TO COMMENTS ON DRAFT SEPTEMBER 1999 QUARTERLY GROUNDWATER SAMPLING REPORT FOR PARCEL B HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

This document presents the Navy's responses to comments from the U.S. Environmental Protection Agency (EPA); California Regional Water Quality Board, San Francisco Bay Region (RWQCB); and Envirometrix Corporation, contractor to the City of San Francisco, on the "Draft September 1999 Quarterly Groundwater Sampling Report for Parcel B Hunters Point Shipyard, San Francisco, California", dated February 29, 2000.

RESPONSES TO EPA

1a. Comment: **According to the monitoring well sampling sheets presented in Appendix C of the Report, water levels were not measured during the sampling of the following Parcel B monitoring wells: IR06MW45A, IR07MW25A, IR07MW28A, IR07MW 26A, IRIOMW33A, IR25MW17A, UT03MWI IA, IR26MW41A, IR61MW05A and IR 10MW2 8A. The water level measurements presented on the sampling sheets for these wells were collected on August 31, 1999, while these wells were sampled between September 1 and September 9, 1999. According to the RAMP, "Several preliminary well measurements should be made prior to initiating sampling of the well. These include determining water level...and calculating purge volumes" (Section 2.3 of the Groundwater Sampling Standard Operating Procedure (SOP 0 1 0), Appendix A of the RAMP). Because water levels fluctuate over time, water levels should be measured in the monitoring wells immediately before initiating sampling, not several days before sampling.**

Response: The water levels recorded on August 31, 1999, were part of the groundwater-level measurement effort and were not part of the analytical sampling event. Groundwater levels on August 31, 1999, were taken on the same day and at low tide in order to interpret groundwater level contours. In addition, water levels were measured immediately prior to sampling to determine purge volumes. These measurements are recorded on the monitoring well sampling sheets in Appendix C of the draft report and Appendix B of the final report.

1b. Comment: **According to Section 2.4, page 10 of SOP 010, "Samples should be collected as soon as the well recovers." The exception to this is for volatile organic compound (VOC) and total petroleum hydrocarbon (TPH) - purgeable samples, which should be collected as soon as there is enough water present in the well to collect a sample. While no criteria is presented in SOP 010 for determining when the well has recovered, a value of 80% of the thickness of the initial water column is typically used as a criteria for well recovery. Therefore, it is necessary to measure water levels immediately before initiating purging, and immediately after purging and before sampling, in**

order to verify that the well has recovered. The Navy should ensure that these water level measurements are collected during future sampling events, in order to verify that the sampling is performed in accordance with the RAMP.

Response: The Navy will ensure that water-level measurements are collected at both times during future sampling events.

2. **Comment:** **The laboratory reporting limit for Aroclor-1221 is 0.2 µg/L, while the applicable screening criteria for this analyte for the On/Off-Site Migration Monitoring Wells is 0. 19 µg/L. This is the only analyte which had a reporting limit that exceeded its applicable screening level. In Section 3.1.2, page 6 of the Report, it is stated that "Aroclor-1221 was reported as non-detected at a quantitation limit of 0.2 µg/L in the sample collected from well IR07MW28A. Since the quantitation limit only slightly exceeds the screening level (0. 19 µg/L), this is not considered a detected exceedance. However, EPA has not concurred with this approach. Additionally, the result for the sample collected from well IR07MW28A is shown as bold in Appendix B, indicating that this is an exceedance of the applicable screening criteria. Conversely, the analytical result for the sample collected from well IR18MW21A also shows non-detect at a quantitation limit of 0.2 µg/L, but is not listed in bold in Appendix B. Let's discuss this at a future BCT meeting to ensure that all parties are in agreement with the Navy's approach to the Aroclor-1221 quantitation limit issue for future quarterly monitoring reports. Further, the agreed upon approach should be thereafter applied uniformly to all of the analytical results of future quarterly monitoring reports.**

Response: Aroclor-1221 was reported as nondetect at a quantitation limit of 0.2 micrograms per liter (µg/L) in the sample collected from well IR07MW28A. The quantitation limit of 0.1 µg/L for Aroclor-1016, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260 met the trigger level for polychlorinated biphenyls (PCB); however, the quantitation limit for Aroclor-1221 could only be lowered to 0.2 µg/L due to limitations of the analytical method (EPA OLM03.1 modified). The quantitation limit only slightly exceeds the trigger level for Aroclor-1221 (0.19 µg/L). Nevertheless, a result of 0.19 µg/L could have been detected in the sample because the laboratory reports concentrations less than the quantitation limit but greater than the method detection limit, if detected in the sample. Therefore, Aroclor-1221 is not considered to be present at levels exceeding the trigger level. The bold font in Appendix B will be corrected since the result is not considered to exceed the trigger level.

The trigger level for monitoring well IR18MW21A was incorrectly listed in Appendix B as a point-of-compliance (POC)-equivalent criterion. The trigger level for the well is equivalent to the sentinel well's trigger levels. As a result, Aroclor-1221 did not exceed the trigger level.

The Navy agrees to further discuss the approach for future groundwater quarterly monitoring reports.

3. **Comment:** **Section 3.2, Data Quality, does not include a table evaluating the precision of the duplicate samples, and does not indicate which sample stations had duplicate samples collected. Additionally, the Data Quality section does not discuss analytical results that are qualified, such as the chromium results for the samples collected from well IR07MWS-4. For future quarterly monitoring reports, the Navy should include a table in the Data Quality section which presents an evaluation of the precision of duplicate samples, and should include a discussion in the Data Quality section concerning analytical results that are qualified.**

Response: The Navy does not believe quarterly reports are the appropriate forum to discuss data quality in such detail. A quality control summary report, which will be presented in the annual report, will discuss all applicable quality control criteria, including comparison of field duplicate results. In addition to its data validation services, ETHIX (the data validation subcontractor) evaluated all applicable quality control criteria during the data validation process.

Appendices A and B report duplicate sample results for monitoring wells IR07MWS-4 and IR18MW21A.

4. **Comment:** **Section 3.4 of the Report discusses the groundwater samples that contained chemical concentrations that exceeded appropriate trigger levels. The fourth sentence of this section states that "In accordance with the RAMP, a letter was sent via email to the BCT on December 13, 1999 stating all exceedances at well IR26MW41A." However, Section 2.3.2 of the RAMP states that "If the trigger level is exceeded for any analyte, the Navy will take the following actions: For initial trigger value exceedances, (1) inform the BCT of the exceedance within 10 business days..... IR26MW41A was sampled on September 7, 1999. " Groundwater sample analytical results are typically available within 14 to 21 days after sampling. Given that the Navy informed the BCT of the sample exceedances on December 13, 1999 (approximately 96 days after sampling occurred), it is likely that the Navy did not act in accordance with the RAMP. The Navy should ensure that the BCT is informed of future sample exceedances within 10 days of receiving sample analytical results, in order to ensure that the Navy is in compliance with the RAMP. Further, the BCT should discuss the RAMP resampling requirements at a future BCT meeting to determine whether or not revisions are appropriate. Specifically, the RAMP requirements about post exceedance resampling may be not be appropriate for every contaminant/monitoring well exceedance. The Navy may want to consider revising the requirements to include a meet and confer with the BCT to determine when and what resampling of groundwater is appropriate to meet the goals of the Parcel B Record of Decision. In addition, EPA would like to be informed of potential exceedances prior to data validation so that we are**

aware of any potential problems at the earliest possible time. EPA understands that the validated data will be the official data set for the groundwater sampling events.

Response: The first quarterly sampling results were reported to the Base Realignment and Closure (BRAC) Closure Team (BCT) within 10 days after validated results were loaded into the database. The unvalidated results were received five weeks after the sampling event. Data validation occurred over the next 5 weeks. The remaining time was spent loading data into the database.

In future sampling rounds, the BCT will be informed of any results that exceed trigger levels within 10 days of receipt of unvalidated data; however, unvalidated data will not be used to determine whether resampling is necessary. Only validated data will be used to determine whether resampling is necessary.

The Navy looks forward to discussing the appropriateness of resampling under certain scenarios where trigger levels are exceeded. The Navy would like to point out that to date resampling events have generally coincided with quarterly sampling events.

5. **Comment:** **The sample collected from sample station IR18MW21A had a zinc concentration which exceeded the applicable screening criteria, and therefore this analytical result should be shown in bold in Appendix B. Additionally, this result should be discussed in Section 3.1.2, Analytical Results for On- and Off-Site Migration Monitoring Wells.**

Response: The trigger level for monitoring well IR18MW21A was incorrectly listed in Appendix B as a POC-equivalent criterion. As specified in the remedial action monitoring plan (RAMP), in Parcel B, the trigger levels for monitoring well IR18MW21A are 10 times the trigger levels for POC wells (and equivalent to trigger levels for sentinel wells). The trigger level for zinc at a sentinel well is 810 µg/L; therefore, the total zinc concentration detected at monitoring well IR18MW21A (103 µg/L) is less than the trigger level at the well.

6. **Comment:** **VOC monitoring. Can we discuss the scope of the VOC monitoring at a future BCT meeting. Per the ROD, EPA is concerned as to whether or not the concentration of vinyl chloride (VC) in groundwater in the vicinity of IR-10 is increasing. The BCT would then review any increases in VC or other VOCs to further evaluate potential threats to future users via the air pathway. Is the data the Navy collected at the one VOC monitoring well in September 1999, sufficient to understand and evaluate changes in potential air pathway threats? Also, is the detection limit the Navy used for vinyl chloride low enough?**

Response: Volatile organic compound (VOC) monitoring well IR10MW33A is located within a known trichloroethene (TCE) source area. Two POC monitoring wells, IR10MW31A1 and PA50MW01A, are located downgradient from IR10MW33A. Sentinel monitoring well IR10MW28A is on the upgradient edge of the source

area. As discussed in the RAMP, these four monitoring wells are being used to monitor the potential degradation of TCE to vinyl chloride.

Groundwater samples from monitoring wells IR10MW33A, IR10MW28A, IR10MW31A1, and PA50MW01A are analyzed for VOCs by EPA Contract Laboratory Program (CLP) low-level volatile organic compound (VOA) analytical method (EPA OLM02.0). All other samples from RAMP monitoring wells are analyzed for VOCs by CLP VOC analytical method (OLM03.1). The quantitation limit for vinyl chloride by CLP VOC and CLP low-level VOA analytical methods are 10 µg/L and 0.5 µg/L, respectively. The Navy believes that a detection limit of 0.5 µg/L is sufficient.

7. **Comment:** **The cover page of the Draft report is incorrectly dated February 29, *1999* as opposed to 2000. If the Navy decides not to revise the draft report but to simply issue a response to comments, EPA requests that the Navy provide a corrected cover page for EPA's file copy of this draft deliverable.**

Response: A corrected cover page will be distributed to recipients of the draft September 1999 report.

8. **Comment:** **EPA appreciates the Navy including the groundwater sampling events and reporting in its April 27, 2000 proposed revisions to the FFA schedule. While EPA is still reviewing the details this proposed schedule, we support the addition of the groundwater sampling at Parcel B to the Navy's master schedule.**

Response: The Navy values EPA's support of open communication regarding the Parcel B quarterly groundwater sampling program.

9. **Comment:** **EPA would be interested in having its contractor, Tech Law, Inc. attend and field QA a future groundwater monitoring event. Please contact Adam Klein at (415) 281-8730 to schedule this.**

Response: The Navy will arrange to contact Mr. Klein to coordinate field quality assurance activities for future groundwater monitoring events.

RESPONSES TO RWQCB

1. **Comment:** **We are uncertain how the Navy determined that implementation of required notification and re-sampling procedures were unnecessary for total and soluble chromium detected in well IR07MW-4. The concentration of both total and soluble chromium exceeded the allowable concentration limit of 15.4 mg/L for point-of-compliance wells. The Report states *"...in both cases where chromium exceeded the trigger level, the detected results were estimated because of potential high bias due to interference from high sample concentrations of calcium and magnesium."* The rationale certainly does not provide justification for non-compliance with the notification requirements,**

and likely does not provide adequate rationale for not implementing the re-sampling procedures. We understand that this well was re-sampled during the next scheduled quarterly sampling event. However, simply reporting the data in the quarterly report and then waiting until the next event for re-sampling is inconsistent with the requirements of the Record of Decision (ROD) and Remedial Action Monitoring Plan (RAMP) for Parcel B.

Response: The Navy acknowledges the RWQCB's concern; however, as discussed in the draft September 1999 report, because chromium concentrations at monitoring well IR07MWS-4 were estimated due to matrix interferences, and the detected concentrations are well below concentration levels that would present any risk to human health or the environment, resampling of monitoring well IR07MWS-4 was deferred until the second-quarter sampling event. The Navy and the RWQCB had different interpretations of resampling requirements.

In future sampling rounds, the BCT will be informed of any results that exceed trigger levels within 10 days of receipt of unvalidated data; however, unvalidated data will not be used to determine whether resampling is necessary. Only validated data will be used to determine whether resampling is necessary.

As discussed in the response to EPA comment 5, the Navy looks forward to discussing the appropriateness of resampling under certain scenarios where trigger levels are exceeded. To date, resampling events have generally coincided with quarterly sampling events.

2. **Comment:** **We are uncertain how the Navy intends to address contaminants detected in the groundwater where trigger levels haven not been established. For example, 4,4-DDT was detected in well IR07MW28A at a concentration of 0.06 µg/L. Several semi-volatile organic constituents were also detected in the groundwater for which trigger levels have not been established. Appendix B of the Report provides a comparison of groundwater analytical data for each well to the appropriate trigger levels. Board staff believes that it would be useful to include some level of analysis for contaminants where trigger levels were not established. We are suggesting that the analysis should include (1) the contaminants detected; (2) the concentrations at which they were detected; (3) the wells at which they were detected; (4) a comparison to any historical groundwater quality data for the contaminants and effected wells, including trends and spatial distribution; and (5) a comparison to established numerical standards for protection of the assigned beneficial uses.**

Response: The Navy acknowledges the RWQCB's concern regarding detected analytes that are not within the scope of the Parcel B quarterly groundwater monitoring program. The Parcel B remedial action groundwater monitoring program is outlined in the Parcel B RAMP, which was approved on August 19, 1999. The RAMP presents the rationale for which wells are to be sampled, the analysis to be performed at each well, and the trigger levels for analytes of concern at each well. The Navy does not believe that the quarterly groundwater program includes defining and implementing new trigger levels for additional analytes.

The Navy would like to discuss possible future amendments to the Parcel B RAMP; however, the Navy does not want additional data analysis to delay future quarterly monitoring reports.

RESPONSES TO ENVIROMETRIX (THE CITY OF SAN FRANCISCO)

1. **Comment:** **The report states that total Chromium concentrations in well IR07MWS-4 were exceeded at 24.5 ppb. However, the total chromium concentration in well IR10MW28A was also exceeded at 35.4 ppb, but not reported in the conclusions or map.**

   Response: Monitoring well IR10MW28A is a sentinel well. As specified in the Parcel B RAMP, the trigger levels for sentinel wells are 10 times the trigger levels for POC wells. The trigger level for chromium at a sentinel well is 157 µg/L; therefore, the total chromium concentration detected at monitoring well IR10MW28A (35.4 µg/L) is less than the trigger level at the well. Conversely, monitoring well IR07MWS-4 is a POC well, and the trigger level is 15.7 µg/L.

2. **Comment:** **In addition, the sample from IR10MW33A does not report any metals. This well is downgradient from well IR10MW28A and would be useful in determining the extent of any contamination. Were samples collected from this well and analyzed for metals and/or other constituents?**

   Response: Monitoring well IR10MW33A is a VOC monitoring well. The well has been located to monitor the potential degradation of TCE to vinyl chloride near IR-10. The well was designed and installed specifically for the Parcel B RAMP to monitor possible VOC migration and is located downgradient from remedial area (RA) 10-1, where TCE was detected.

   As specified in the RAMP, samples from IR10MW33A are only analyzed for VOCs. This monitoring well is not intended to collect samples for metals or other constituents. POC monitoring wells PA50MW01A and IR10MW31A and sentinel well IR10MW28A will be used to assess metals as well as VOC constituents in the vicinity of RA 10-1.

3. **Comment:** **Has the source of the Chromium contamination in the area of IR07MWS-4 and IR10MW28A been identified?**

   Response: As stated in the response to comment 1, the chromium detection at monitoring well IR10MW28A does not exceed the trigger level. The reported results of total and soluble chromium at IR07MWS-4 exceeded the trigger level; however, the results were estimated as a result of potential high bias in the sample due to interference from high sample concentrations of calcium and magnesium. The sampling results from the second, third, and fourth quarters will be used to determine whether unacceptable levels of chromium are present near IR07MWS-4.

4. **Comment:** **The Nickel concentration in IR10MW28A is 93.8 ppb. This does not exceed the trigger level of 96.5 ppb, but is very close.**

Response: As stated in the response to comment 1, monitoring well IR10MW28A is a sentinel well. The trigger level for nickel at a sentinel well, which is 10 times the Hunters Point groundwater ambient level (96.5 µg/L), is 965 µg/L. Therefore, the detected nickel concentration at IR10MW28A (93.8 µg/L) is not approaching the trigger level.

5. **Comment:** **It would seem useful to prepare iso-concentration maps of chemicals which exceed the trigger levels to identify the areas of elevated concentrations of chemicals, in order to identify any potential source for the groundwater contamination.**

Response: The Navy acknowledges the suggestion from Envirometrix; however, the Navy believes that annual rather than quarterly reports are a more appropriate forum to analyze consistently elevated chemical concentrations, because multiple sample results would be available for analysis. Trends in chemical concentrations would be more apparent and would produce better conclusions. In addition, as specified in the Parcel B RAMP, annual reports are intended to evaluate and summarize quarterly, semiannual, and annual monitoring results for each year.

TETRA TECH EM INC.'S RESPONSE TO NAVY COMMENTS ON SEPTEMBER 1999 GROUNDWATER MONITORING REPORT FOR PARCEL B AT HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

1. **Comment:** **Cover, Date. Date is incorrect**

   Response: The date has been corrected to February 29, 2000.

2. **Comment:** **Page 3, Para. 1, Line 2. Well casing or borehole volume? What is the appropriate purging criteria. Confirm this.**

   Response: Well casing volume is the appropriate purge criterion

3. **Comment:** **Page 3, Para. 1, Line 6. Provide explanation or cite for "stability criteria."**

   Response: The stability criteria are noted in Section 4.3.3 of the field sampling plan (FSP): The measurements must be within 10 percent of the previous measurements for each parameter noted in TtEMI standard operating procedure (SOP) No. 10, revision 3, plus dissolved oxygen and turbidity, or until the parameters have stabilized or four well volumes have been purged.

4. **Comment:** **Page 3, Para. 1. Need to provide a better explanation of what samples are collected after the well is allowed to recover fully and what samples are taken right away. Cite sampling protocols or SOPs that justify the differences. Where was this explained in the SAP or the RAMP?**

   Response: Sample bottles were filled in accordance with Section 4.3.4 of the FSP: Volatiles and total petroleum hydrocarbons (TPH) as gasoline were collected first, then other organics, and then inorganics.

5. **Comment:** **Page 3, Para. 2, Line 4. Are the total metals samples filtered? I am a little confused. It seems that we are comparing these values to HGALS which were determined from filtered samples. Does this seem right?**

   Response: Total metals are collected without a filter during low-flow groundwater sample collection, which occurs at 10 percent of sampled wells per quarter.

6. **Comment:** **Page 3, Para. 3, Line 5. Replace with "Pump was flushed with distilled water."**

   Response: The comment will be implemented.

7. **Comment:** **Page 3, Para. 4, Last Line. What is the plan for purge water if contaminant concentrations exceed the allowable threshold outlined by the City of San Francisco.**

   Response: If purge water does not meet batch wastewater discharge requirements, the water will be treated and discharged once it has been determined to be satisfactory. Water treatment could take many forms depending upon the cause for failing

discharge requirements and will be determined on a case-by-case basis. Historically at HPS, purge water from groundwater sampling events has met City discharge requirements.

8. **Comment:** **Page 5, Para. 7, Bullets. Group exceedances by well to clearly show that only 2 wells exceeded criteria.**

   Response: The comment will be implemented.

9. **Comment:** **Page 6, Para. 3, Line 1. "non-detect" not "non-detected."**

   Response: The comment will be implemented.

10. **Comment:** **Page 7, Para. 1, Line 5. 10% of the samples would be 3 not 2. 2 is less than 10 percent. Need to round up not down.**

    Response: Ten percent of 24 samples is 2.4. The cost of an additional field duplicate can be up to $900. TtEMI does not believe this is a necessary expense, but will make the change if the Navy requires it.

11. **Comment:** **Page 7, Para. 1, Line 6. What are the QAPP requirements for rinsate blanks?**

    Response: The quality assurance project plan (QAPP) requires two equipment rinsate blanks for each field crew during the 4-day sampling event. Two equipment blanks per field crew for the 4-day event should adequately monitor field procedures.

12. **Comment:** **Page 7, Para. 2, Line 1. What samples exceeded the temperature – metals or VOCs?**

    Response: All portions of the sample from nine wells exceeded 4 $^{o}C \pm 2\ ^{o}C$. All results for volatiles in these samples were estimated for this reason.

13. **Comment:** **Page 8, Para. 1, Line 1. Logic is inconsistent. If there was uncertainty with one of the samples, it should have been resampled to remove the uncertainty.**

    Response: The result was estimated due to potential matrix interference from high concentrations of calcium and magnesium in the sample. Because the uncertainty is due to the sample matrix, resampling is not expected to remove the uncertainty.

14. **Comment:** **Page 8, Para. 1, Line 9. Resampling should be performed early enough to address exceedances in the same quarterly report.**

    Response: Including resampling results in the same quarterly report is difficult due to scheduling constraints. Currently, quarterly reports are scheduled to be submitted to the BCT either during or before the next quarter sampling event. Including resampling information in a quarterly report could delay its submittal up to 4 to 6 weeks due to lab analysis and data validation. TtEMI strongly discourages including unvalidated data in quarterly reports and does not believe the extra costs involved with expedited analysis and validation are warranted in order to include

resampling information.

15. **Comment:** **Page 10, Para. 1, Line 5. "IR26MW54A?" Should this be 45?**

Response: The comment will be implemented.

16. **Comment:** **Page 13. Table 3 should include codes identifying the source of the trigger levels.**

Response: The comment will be implemented.

17. **Comment:** **Page 13. Table 3 needs units.**

Response: The comment will be implemented.

18. **Comment:** **Page 13. Why is Barium at 504 µg/L? No NAWQC established for Eco, but HH consumption is set at 1,000 µg/L**

Response: Tetra Tech will discuss with the Navy the establishment of new trigger levels.

The Hunters Point groundwater ambient level (HGAL) for barium is 504 µg/L. There is no National Ambient Water Quality Criterion (NAWQC) for barium. Therefore, as specified in the Parcel B remedial action monitoring plan (RAMP), the HGAL is used as the screening criterion.

19. **Comment:** **Page 13. Why is total chromium at 15.7? Aren't we mostly concerned about Cr VI? If so, Cr VI has a NAWQC of 50 µg/L. I would think that total Cr would be 50 µg/L.**

Response: See the response to comment 18.

The HGAL for chromium is 15.7 µg/L. There is no NAWQC for chromium; therefore, as specified in the Parcel B RAMP, the HGAL is used as the screening criterion.

20. **Comment:** **Page 13. Note again: Cr VI has a NAWQC of 50 µg/L.**

Response: Comment noted.

21. **Comment:** **Page 13. General note: If we are concerned about soluble metals, should we be using the NAWQC soluble metals multipliers to get the trigger levels.**

Response: The NAWQC criteria used in the RAMP are for soluble metals. A multiplier would be needed to compare total metals with NAWQC soluble metal criteria.

22. **Comment:** **Figure 2. If TCE doesn't exceed any of the trigger levels why are we showing a plume outline on Figure 2?**

Response: The trichloroethene (TCE) plume presented on Figure 2 was developed from the remedial investigation. The intention of the plume is to show the previous

location of the plume and where monitoring well IR10MW33A was installed relative to the plume. The well was installed for the monitoring program in 1999 specifically for monitoring of volatile organic compounds (VOC).

The legend for Figure 2 will clarify that it is a historic TCE plume based on remedial investigation data and it is to be used for reference only. Furthermore, the next quarterly report will separate into two figures: (1) current results ("spider boxes") and (2) locations of wells with historic or remedial investigation information.

23. **Comment:** **Figure 2. Same question on the nickel plume. If we sampled the wells this round and didn't have any nickel hits, around the plume, then why are we showing the plume?**

Response: See the response to comment 22.

24. **Comment:** **COCs. COCs included in report should be the ones with the laboratory signatures.**

Response: The comment will be implemented.

25. **Comment:** **Appendix B, Page B-8. IR18MW21A screening level criteria are incorrect. The text says that results from this well are supposed to be compared to sentinel well screening criteria. All screening values are off by a factor of 10.**

Response: The comment will be implemented.

COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY II (CLEAN II)
Northern and Central California, Nevada, and Utah
Contract No. N62474-94-D-7609
Contract Task Order No. 0270

Prepared For

DEPARTMENT OF THE NAVY
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DRAFT SEPTEMBER 1999 QUARTERLY GROUNDWATER SAMPLING REPORT FOR PARCEL B HUNTERS POINT SHIPYARD SAN FRANCISCO, CALIFORNIA

February 29, 2000

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